## Claims Listing

1. (currently amended) A compound according to Formula 1

$$R_1$$
 $R_2$ 
 $R_4$ 
 $R_4$ 
 $R_4$ 
 $R_4$ 
 $R_4$ 
 $R_4$ 
 $R_4$ 

Formula 1

wherein

Z is NH or O;

X is selected from OH, NH<sub>2</sub>, OR, NHR, NRR, SH, or SR;

R<sub>1</sub> and R<sub>2</sub> are independently selected from [[H,]]-substituted or unsubstituted alkyl, alkenyl, alkynyl, aryl, fused aryl, heterocycle or fused heterocycle, and R<sub>1</sub> and R<sub>2</sub> together with the carbon atoms to which they are attached may form a 5- or 6-membered ring;

R<sub>3</sub> is substituted or unsubstituted alkyl, alkenyl, alkynyl, aryl, fused aryl, heterocycle or fused heterocycle; and

wherein R and R<sub>4</sub> are independently H, or substituted or unsubstituted alkyl, alkenyl, alkynyl, aryl, fused aryl, heterocycle or fused heterocycle;

wherein each heterocycle is independently a 5- or 6-membered heterocyclic ring containing at least one atom of S, N, or O,

and wherein substituted groups are substituted with one or more substituents selected

from the group consisting of NH<sub>2</sub>, OH, SH, NC, C(O)OR, aryl, alkyl, alkenyl,
alkynyl, F, Cl, Br, NHCOR, NHCONH<sub>2</sub>, NHCSNH<sub>2</sub>, OCH<sub>2</sub>COOH,
OCH<sub>2</sub>CONH<sub>2</sub>, OCH<sub>2</sub>CONHR, OC(Me)<sub>2</sub>COOH, OC(Me)<sub>2</sub>CONH<sub>2</sub>,
NHCH<sub>2</sub>COOH, NHCH<sub>2</sub>CONH<sub>2</sub>, NHSO<sub>2</sub>R, NHSO<sub>2</sub>CF<sub>3</sub>, PO<sub>3</sub>H, SO<sub>3</sub>H,
(CH<sub>2</sub>)<sub>1-3</sub>COOH, CH=CHCOOH, O(CH<sub>2</sub>)<sub>1-4</sub>COOH, NHCOCH<sub>2</sub>CH(OH)COOH,
CH(COOH)<sub>2</sub>, CH(PO<sub>3</sub>H)<sub>2</sub>, OCH<sub>2</sub>CH<sub>2</sub>COOH, and NHCHO.

2. (currently amended) A compound according to Formula 2

$$\begin{array}{c|c}
R_1 & X & X \\
R_2 & N & R_4
\end{array}$$

Formula 2

wherein Z is NH or O;

- X is CONH<sub>2</sub>, COOR, CONHR, CONRR, heterocycle, [[R,]] SO<sub>3</sub>H, P(O<sub>3</sub>H), CH(COOH)<sub>2</sub>, CH(PO<sub>3</sub>H)<sub>2</sub>, tetrazole, or triazole;
- R<sub>1</sub> and R<sub>2</sub> are independently selected from [[H,]] substituted or unsubstituted alkyl, alkenyl, alkynyl, aryl, fused aryl, heterocycle or fused heterocycle, and R<sub>1</sub> and R<sub>2</sub> together with the carbon atoms to which they are attached may form a 5- or 6-membered ring;
- R<sub>3</sub> is substituted or unsubstituted <del>alkyl</del>, alkenyl, alkynyl, aryl, fused aryl, heterocycle or fused heterocycle; and
- wherein R and R<sub>4</sub> are independently H, <u>or</u> substituted or unsubstituted alkyl, alkenyl, alkynyl, aryl, fused aryl, heterocycle or fused heterocycle;
- wherein each heterocycle is independently a 5- or 6-membered heterocyclic ring containing at least one atom of S, N, or O,
- and wherein substituted groups are substituted with one or more substituents selected

  from the group consisting of NH<sub>2</sub>, OH, SH, NC, C(O)OR, aryl, alkyl, alkenyl,
  alkynyl, F, Cl, Br, NHCOR, NHCONH<sub>2</sub>, NHCSNH<sub>2</sub>, OCH<sub>2</sub>COOH,
  OCH<sub>2</sub>CONH<sub>2</sub>, OCH<sub>2</sub>CONHR, OC(Me)<sub>2</sub>COOH, OC(Me)<sub>2</sub>CONH<sub>2</sub>,
  NHCH<sub>2</sub>COOH, NHCH<sub>2</sub>CONH<sub>2</sub>, NHSO<sub>2</sub>R, NHSO<sub>2</sub>CF<sub>3</sub>, PO<sub>3</sub>H, SO<sub>3</sub>H,
  (CH<sub>2</sub>)<sub>1-3</sub>COOH, CH=CHCOOH, O(CH<sub>2</sub>)<sub>1-4</sub>COOH, NHCOCH<sub>2</sub>CH(OH)COOH,
  CH(COOH)<sub>2</sub>, CH(PO<sub>3</sub>H)<sub>2</sub>, OCH<sub>2</sub>CH<sub>2</sub>COOH, and NHCHO.

3. (currently amended) A compound according to Formula 3,

$$\begin{array}{c|c}
 & O & X \\
 & X \\
 & & X \\
 &$$

Formula 3

wherein X is NH<sub>2</sub>, OR, NHR, NRR, heterocycle, or R;

R<sub>1</sub> and R<sub>2</sub> are independently selected from H, substituted or unsubstituted alkyl, alkenyl, alkynyl, aryl, fused aryl, heterocycle or fused heterocycle, and R<sub>1</sub> and R<sub>2</sub> together with the carbon atoms to which they are attached may form a 5- or 6-membered ring;

R<sub>3</sub> is substituted or unsubstituted alkyl, alkenyl, alkynyl, aryl, fused aryl, heterocycle or fused heterocycle; and

wherein R and R<sub>4</sub> are independently H, <u>or</u> substituted or unsubstituted alkyl, alkenyl, alkynyl, aryl, fused aryl, heterocycle or fused heterocycle;

wherein each heterocycle is independently a 5- or 6-membered heterocyclic ring containing at least one atom of S, N, or O,

and wherein substituted groups are substituted with one or more substituents selected

from the group consisting of NH<sub>2</sub>, OH, SH, NC, C(O)OR, aryl, alkyl, alkenyl,
alkynyl, F, Cl, Br, NHCOR, NHCONH<sub>2</sub>, NHCSNH<sub>2</sub>, OCH<sub>2</sub>COOH,
OCH<sub>2</sub>CONH<sub>2</sub>, OCH<sub>2</sub>CONHR, OC(Me)<sub>2</sub>COOH, OC(Me)<sub>2</sub>CONH<sub>2</sub>,
NHCH<sub>2</sub>COOH, NHCH<sub>2</sub>CONH<sub>2</sub>, NHSO<sub>2</sub>R, NHSO<sub>2</sub>CF<sub>3</sub>, PO<sub>3</sub>H, SO<sub>3</sub>H,
(CH<sub>2</sub>)<sub>1-3</sub>COOH, CH=CHCOOH, O(CH<sub>2</sub>)<sub>1-4</sub>COOH, NHCOCH<sub>2</sub>CH(OH)COOH,
CH(COOH)<sub>2</sub>, CH(PO<sub>3</sub>H)<sub>2</sub>, OCH<sub>2</sub>CH<sub>2</sub>COOH, and NHCHO.

## 4. (currently amended) A compound according to Formula 4 or Formula 5

Formula 4

$$\begin{array}{c|c} R_1 & N & X & R' & V & R'' \\ \hline R_2 & N & R_4 & & & \\ \end{array}$$

Formula 5

wherein U is selected from CH, CR, COR, CSR, CNHR, CNRR, CNHCH<sub>2</sub>COOH, CNHCH<sub>2</sub>COOR, CNHCH<sub>2</sub>CONH<sub>2</sub>, and N;

V is N, CH, or CR;

Z is NH or O;

X is COOH, COOR, CONH<sub>2</sub>, CONHR, CONRR, or heterocycle;

- R<sub>1</sub> and R<sub>2</sub> are independently selected from H, substituted or unsubstituted alkyl, alkenyl, alkynyl, aryl, fused aryl, heterocycle and fused heterocycle, and R<sub>1</sub> and R<sub>2</sub> together with the carbon atoms to which they are attached may form a 5- or 6-membered ring;
- R', R", R" are independently H, OH, OR, SH, SR, NH<sub>2</sub>, NHR, NRR, NO<sub>2</sub>, Cl, F, Br, I, CN, N<sub>3</sub>, COR, COOH, COOR, CONH<sub>2</sub>, CONHR, CONRR, C(=NH)NHR, CH<sub>2</sub>CH<sub>2</sub>COOH, OCH<sub>2</sub>COOH, NHCONH<sub>2</sub>, NHCHO, NHSO<sub>2</sub>R, NHCOR, substituted or unsubstituted alkyl, alkenyl, alkynyl, aryl, fused aryl, heterocycle or fused heterocycle; and
- wherein R and R<sub>4</sub> are independently H, <u>or</u> substituted or unsubstituted alkyl, alkenyl, alkynyl, aryl, fused aryl, heterocycle or fused heterocycle;

- wherein each heterocycle is independently a 5- or 6-membered heterocyclic ring containing at least one atom of S, N, or O,
- and wherein substituted groups are substituted with one or more substituents selected from the group consisting of NH<sub>2</sub>, OH, SH, NC, C(O)OR, aryl, alkyl, alkenyl, alkynyl, F, Cl, Br, NHCOR, NHCONH<sub>2</sub>, NHCSNH<sub>2</sub>, OCH<sub>2</sub>COOH, OC(Me)<sub>2</sub>COOH, OC(Me)<sub>2</sub>COOH, OC(Me)<sub>2</sub>CONH<sub>2</sub>, NHCH<sub>2</sub>COOH, NHCH<sub>2</sub>COOH, NHCH<sub>2</sub>COOH, NHSO<sub>2</sub>R, NHSO<sub>2</sub>CF<sub>3</sub>, PO<sub>3</sub>H, SO<sub>3</sub>H, (CH<sub>2</sub>)<sub>1-3</sub>COOH, CH=CHCOOH, O(CH<sub>2</sub>)<sub>1-4</sub>COOH, NHCOCH<sub>2</sub>CH(OH)COOH, CH(COOH)<sub>2</sub>, CH(PO<sub>3</sub>H)<sub>2</sub>, OCH<sub>2</sub>CH<sub>2</sub>COOH, and NHCHO.
- 5. (previously canceled)
- 6. (currently amended) A compound according to Formula 7

Formula 7

wherein Z is NH or O;

- R<sub>1</sub> and R<sub>2</sub> are independently selected from H, substituted or unsubstituted alkyl, alkenyl, alkynyl, aryl, fused aryl, heterocycle or fused heterocycle;
- R<sub>3</sub> is substituted or unsubstituted alkyl, alkenyl, alkynyl, aryl, fused aryl, heterocycle, fused heterocycle, wherein R may further optionally include a COOH group that is covalently coupled to R via zero to three atoms;
- R<sub>5</sub> and R<sub>6</sub> are either H, alkyl, or together are connected via an additional 1-4 atoms to form a substituted or unsubstituted cyclic group containing 3-6 atoms; and

wherein R and R<sub>4</sub> are H, substituted or unsubstituted alkyl, alkenyl, alkynyl, aryl, fused aryl, heterocycle or fused heterocycle;

- wherein each heterocycle is independently a 5- or 6-membered heterocyclic ring containing at least one atom of S, N, or O,
- and wherein substituted groups are substituted with one or more substituents selected from the group consisting of NH<sub>2</sub>, OH, SH, NC, C(O)OR, aryl, alkyl, alkenyl, alkynyl, F, Cl, Br, NHCOR, NHCONH<sub>2</sub>, NHCSNH<sub>2</sub>, OCH<sub>2</sub>COOH, OCH<sub>2</sub>COOH, OCH<sub>2</sub>COOH, OCH<sub>2</sub>COOH, OCH<sub>2</sub>COOH, NHCH<sub>2</sub>COOH, NHCH<sub>2</sub>COOH, NHSO<sub>2</sub>R, NHSO<sub>2</sub>CF<sub>3</sub>, PO<sub>3</sub>H, SO<sub>3</sub>H, (CH<sub>2</sub>)<sub>1-3</sub>COOH, CH=CHCOOH, O(CH<sub>2</sub>)<sub>1-4</sub>COOH, NHCOCH<sub>2</sub>CH(OH)COOH, CH(COOH)<sub>2</sub>, CH(PO<sub>3</sub>H)<sub>2</sub>, OCH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>COOH, and NHCHO.
- 7. (currently amended; withdrawn) A pharmaceutical composition comprising a compound according to any one of claims 1-4 and 6, or a pharmaceutically acceptable salt thereof, and a pharmaceutically acceptable carrier.
- 8. (withdrawn) A method of treating a viral disease a hepatitis C infection, comprising administering a therapeutically effective amount of a composition according to claim 7 to a subject in need of such treatment.